

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

TERAHERTZ QUANTUM CASCADE LASER

the specification of which was filed on October 10, 2002 as International Application No. PCT/GB2002/004604.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to herein.

I acknowledge the duty to disclose all information known to me that is material to patentability in accordance with Title 37, Code of Federal Regulations, § 1.56.

## FOREIGN PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

☒ no such foreign applications have been filed

☐ such foreign application have been filed as follows:

EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Application Number	Country	Date of Filing	Priority Claimed Under 35 USC 119
			___ Yes No ___
			___ Yes No ___
			___ Yes No ___

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Application Number	Country	Date of Filing

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATIONS

I hereby claim priority benefits under Title 35, United States Code §119(e), of any United States provisional patent application(s) listed below:

☒ no such U.S. provisional applications have been filed.

☐ such U.S. provisional application have been filed as follows:

Application Number	Date of Filing	Priority Claimed Under 35 USC 119
		___ Yes No ___
		___ Yes No ___
		___ Yes No ___

CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

I hereby claim the benefit under Title 35, United States Code, §120 of the United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose all information that is material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56 which became available to me between the

filing date of the prior application and the national or PCT international filing date of this application:

☒ no such U.S./PCT applications have been filed.

☐ such U.S./PCT application have been filed as follows:

Application Number	Relationship	Parent Application	Date of Filing

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint:

All practitioners at Customer Number 24998

all of **Dickstein Shapiro Morin & Oshinsky LLP**, 2101 L Street NW, Washington, DC 20037-1526, jointly, and each of them severally, my attorneys at law/patent agent(s), with full power of substitution, delegation and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the U. S. Patent and Trademark Office connected therewith.

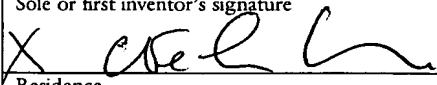

The undersigned hereby authorizes the U.S. attorney or agent named herein to accept and follow instructions from TeraView Limited as to any action to be taken in the United States Patent and Trademark Office regarding this application without direct communication between the U.S. attorney or agent and the undersigned. In the event of a change in the persons from whom instructions may be taken, the U.S. attorney or agent named herein will be so notified by the undersigned.

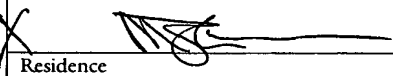

Please mail all correspondence to Stephen A. Soffen, whose address is:

**Dickstein Shapiro Morin & Oshinsky LLP**  
2101 L Street NW  
Washington, DC 20037-1526

Please direct telephone calls to: Stephen A. Soffen at (202) 828-4879.

Please direct facsimiles to: (202) 887-0689

Full name of sole or first inventor <b>Stefano Barbieri</b>	
Sole or first inventor's signature 	Date  12-05-2005
Residence <b>Cambridge, United Kingdom</b>	
Citizenship <b>Italy</b>	
Mailing Address c/o Tera View Limited Platinum Building St. John's Innovation Park <b>CAMBRIDGE; CB4 0WS; UNITED KINGDOM</b>	

Full name of second inventor, if any <b>Michael J. Evans</b>	
Second inventor's signature 	Date  17-5-5
Residence <b>Cambridge, United Kingdom</b>	
Citizenship <b>United Kingdom</b>	
Mailing Address c/o TeraView Limited Platinum Building St. John's Innovation Park <b>CAMBRIDGE; CB4 0WS; UNITED KINGDOM</b>	

Full name of third inventor, if any	
Third inventor's signature	Date
Residence	
Citizenship	
Mailing Address	

Full name of fourth inventor, if any	
Fourth inventor's signature	Date
Residence	
Citizenship	
Mailing Address	

## ASSIGNMENT BY INVENTORS

**THIS ASSIGNMENT**, by Stefano Barbieri and Michael J. Evans (hereinafter referred to as Assignors), residing at c/o Tera View Limited, Platinum Building, St. John's Innovation Park, Cambridge, CB4 0WS, UNITED KINGDOM, respectively;

**WHEREAS**, Assignors have invented certain new and useful improvements in TERAHERTZ QUANTUM CASCADE LASER, set forth in U.S. application Serial No. 10/530,733; and

**WHEREAS**, TeraView Limited, a corporation organized under and pursuant to the laws of United Kingdom having a place of business at Platinum Building, St. John's Innovation Park, Cambridge, CB4 0WS, UNITED KINGDOM (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

**NOW, THEREFORE**, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property including all rights of priority, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and

entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

**AND** for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

**AND** for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

**AND** Assignors hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP

All practitioners at Customer Number 24998

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

X 12-05-2005  
Date

X Stefano Barbieri  
Stefano Barbieri

Witness: X

X 12/05/05  
Date

X Pamela Connelly  
PAMELA CONNELLY

Witness: X

X 12/05/05  
Date

X Pamela Geldart  
PAMELA GELDART



X 17-5-5  
Date

X ~~17-5-5~~  
Michael J. Evans

Witness: X

X P. Connelly  
Date

X 17/05/08  
PAMELA CONNELLY

Witness: X

X 17/05/05  
Date

X Pam Geldart.  
PAMELA GELDART